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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/669,513 09/25/00 MEYERS

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WM02/0522

EXAMINER

NGUYEN, T

ART UNIT

PAPER NUMBER

2632

DATE MAILED:

05/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/669,513

Applicant(s)

Meyers et al.

Examiner

Tai T. Nguyen

Art Unit

2632

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-16 and 18-21 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 7, and 17 is/are rejected.
- 7) ☒ Claim(s) 3, 4, and 6 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Sep 25, 2000 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

Art Unit: 2632

## **DETAILED ACTION**

### ***Specification***

1. Claim 3 is objected to because of the following informalities:

Claim 3, lines 17 "the step of stopping the changing torque" should be read as ---- the step of removing the changing torque ----.

Appropriate correction is required.

### ***Drawings***

2. The drawings are objected to because.

Figure 1, all numeric blocks have to be labeled.

Correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5, 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama [ U.S. Pat. 5,265,020 ] in view of Yoshimura [ U.S. Pat. 4,650,212 ].

Art Unit: 2632

**Regarding to claim 1**, Nakayama discloses the torque distribution control apparatus for four wheel vehicle including all subject matters as following:

a brake controller (10) for applying a change of torque to the wheels (6, 7, 8, 9) by supplied the braking pressure to the braking devices (11, 12, 13, 14) [ as shown in Figure 1; col. 8-26 ];

a wheel speed sensor (44) for measuring a change in a wheel condition since initiating the step of applying a change of torque [ as shown in figure 2; col. 53-54 ];

Nakayama just fails to disclose the step of indicating wheel lift if the change in wheel condition is greater than a predetermined value. Yoshimura discloses a vehicle suspension system including an indicator (38) for indicating wheel lift [ col. 3, lines 44-65 ]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the indicator (38) as taught by Yoshimura into the system as disclose by Nakayama in order to make the torque distribution control apparatus for four wheel vehicle more effective to apply to the present invention because it indicates the vehicle rolling or lifting condition to the driver of the vehicle in order to alert the driver of the lifting condition.

**Regarding to claim 2**, Nakayama the condition is one selected from the group of speed.

**Regarding to claim 5**, Nakayama discloses that the step of applying a change of torque by applying a brake to the wheel [ col. 5, lines 20-26 ].

**Regarding to claim 7**, Nakayama fails to disclose the step of applying a change of torque comprises applying engine torque, but it would have been obvious to a person having ordinary

Art Unit: 2632

skill in the art to know that the engine is used to apply the torque for the vehicle in order for the vehicle to run. What happens if the vehicle have without an engine, which is used to apply the torque to the vehicle?. The vehicle is only in the park mode and, therefore have nothing to do with the wheel lift condition or measuring the wheel speed.

**Regarding to claim 17**, Nakayama discloses the torque distribution control apparatus for four wheel vehicle including all subject matters as following:

a wheel speed sensor (44) coupled to the wheel producing a wheel speed signal [ as shown in Figure 2 ];

a torque control system in the form of the torque distribution controller (16) coupled to the wheel for changing the torque at the wheel [ as shown in Figure 2; col. 5, line 64 through col. 6, line 17 ];

a controller in the form of the engine controller (15) coupled to said torque control system (16) and the wheel speed sensor (44), wherein the controller (15) receives an accel signal from the accel sensor (38) which detects a quantity of accel operated by driver, and then outputs an operation control signal to the throttle motor (37) so as to adjust the opening of the throttle valve (36) corresponding to the quantity of accel operated by the driver, and controller (15) also receives a control signal from a torque control system (16) then changes to engine output in order to obtain the engine output torque required to change the torque distribution [ col. 5, lines 27-38 ]. Nakayama fails to disclose the indicating lift in response to a predetermined change in wheel speed. Yoshimura discloses the vehicle suspension system including a controller (34) having a

Art Unit: 2632

built-in computer which receives the output signals of a steering angle sensor (35) and a vehicle speed sensor (36) for indicating lift in response to a predetermined change in wheel speed on an indicator (38) [ as shown in Figure 1; col. 3, lines 44-65 ]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the controller (34) as taught by Yoshimura into the system as disclosed by Nakayama in order to make the torque distribution control apparatus for four wheel vehicle more effective to apply to the present invention because it indicates the vehicle rolling or lifting condition to the driver of the vehicle in order to alert the driver of the lifting condition.

***Allowable Subject Matter***

5. Claims 3-4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 8-16 and 18-21 are allowed.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schiffmann [ U.S. pat. 6,002,974 ];

Akuta et al. [ U.S. Pat. 5,370,199 ];

Art Unit: 2632

matsumoto [ U.S. Pat. 4,976,330 ]; and

Ohashi et al. [ U.S. Pat. 4,761,022 ].

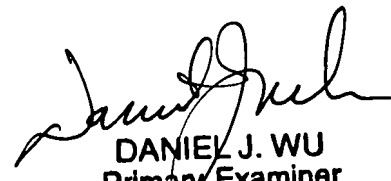
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai T. Nguyen whose telephone number is (703) 308-0160. The examiner can normally be reached on Monday to Friday from 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass, can be reached on (703)305-4717. The fax phone number for this Group is (703) 305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Examiner: Tai T. Nguyen

Date: May 15, 2001

  
DANIEL J. WU  
Primary Examiner  
05/17/01